Leica mojoRTK
Public Release Notes

Version 2612

English

- when it has to be right

Leica Geosystems

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1 Introduction

General information	Leica Geosystems provides free of charge software updates for the Leica mojoRTK in order to provide customers with the best possible experience. This document describes the changes in the latest software release, how to use the new functionality and the various methods to upgrade the software. The Release Notes for the mojoRTK system should be read in conjunction with the latest version of the mojoRTK user manual which is available at www.virtualwrench.com
Current Version	▪ Leica mojoRTK version 2612 ▪ Released March 2011
Compatibility	This software is compatible with all Leica mojoRTK devices.
	It is recommended that if using the Leica mojoRTK console with a Leica mojo3D that the software on this is also upgraded to the latest version in order to obtain the full benefits of the latest software.

2 New functionality

Overview

- New supported steer solutions
  - SteerDirect Hydraulic
  - SteerDirect CAN
  - SteerDirect SRK
- Configuring SteerDirect Hydraulic and SteerDirect SRK
- Expansion of steer kit diagnostics
- Error check for SteerDirect SRK firmware version and configuration compatibility
- New waylines via the mojo3D while guiding to old waylines
- mojoRTK SRK configuration made available while being used with a mojo3D
- Customisation of PVED configuration
- SRK wheel angle sensor error detection

2.1 New and previously supported steer solutions

Benefits

Included in this release are a number of newly supported steer solutions, as listed below. These solutions open up significant opportunities for mojoRTK customers to steer a variety of equipment.

The new SteerDirect Hydraulic **(patent pending)** system from Leica Geosystems delivers precision and simplicity to the hydraulic steering market. The SteerDirect Hydraulic design incorporates all the steer components on a single bracket saving costs, installation time while delivering unprecedented steering precision and performance.

Less cables, less hydraulic hoses, less complication, less hassle, more performance.

You'll smile when your neighbour says, why didn't they think of this before.

In the coming weeks and months, many more SteerDirect solutions will be added to the growing list.

Leica leading the way in precision steering!

Supported steer solutions

New supported steer solutions

SteerDirect Hydraulic

John Deere 7x20 series
John Deere 7x30 series
John Deere 8x20 series
Case MX series

SteerDirect CAN

AGCO DTXXA, DTXXB
Challenger 6XXB, 6XXC, 9XXB
ACGO Gleaner combine harvesters
Massey Ferguson combine harvesters
Challenger B Series combine harvesters

SteerDirect SRK

Case STX Large Frame 4WD
Case MX with factory fitted components
Case Puma 1XX, 2XX
New Holland 71X0, 72X0

Previously released steer solutions

SteerDirect CAN

Challenger 7XXB, 7XXC, 8XXB, 8XXC, 9XXC

Massey Ferguson 74XX, 84XX, 86XX

Fendt 818, 820, 936

SteerDirect SRK

Case MX Trimble aftermarket fitted components

Case and New Holland combine harvesters

John Deere 8X20 series

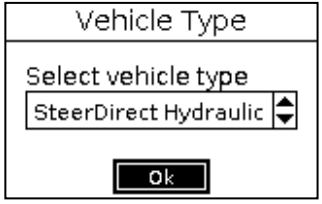
2.2 Configuring SteerDirect Hydraulic and SteerDirect SRK (Steer Ready Kit)

- Never before has the configuration of a hydraulic steer solution been this easy.
  After the SteerDirect Hydraulic is installed and the mojoRTK console is powered on for the first time, it will initiate a configuration sequence designed to guide you through the initial setup of the console.
  The mojoRTK User Manual explains the standard configuration settings for the mojoRTK console (refer to the section 'Running the mojoRTK Console for the First Time'). Follow the on screen prompts to set up your specific equipment in less than 5 minutes. Having concerns, contact your local dealer via Virtual Wrench and they will help you as though they are in the cab with you. Simple, easy and supported remotely. No one offers you service like Leica and your local Leica dealer.

  To change selections manually follow the prompts below:

  Go to Settings>Vehicle>Vehicle Wizard>

  Select Vehicle Type as shown below:



  Select Manufacturer>Model and follow the remaining easy to follow prompts to set up your Leica SteerDirect Hydraulic installation.

- Configuring your SteerDirect SRK is a very similar process to configuring the SteerDirect Hydraulic with the exception of selecting the Vehicle Type which will be Leica Steer Ready Kit as shown below:

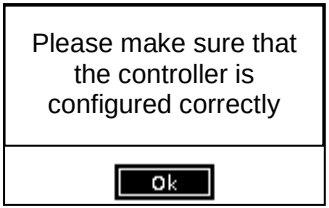
2.3 Expansion of steer kit diagnostics

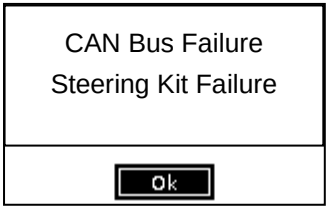
Steering Diagnostics

- This software version allows for an enhanced steering test for the SRK firmware and steer controller. By ensuring the version of firmware preloaded on the steer controller meets the Leica mojoRTK system compatibility requirements, the system performs a series of tests. Should the error message be returned during this process please contact your local Leica dealer to arrange for the appropriate firmware version to be loaded.

  The message below should be showing if the mojoRTK system diagnostics are successful.

The following error messages will be displayed if the steer controller is not configured correctly or other faults are detected:





More information is available by manufacturer and model at http://www.agguidance.com/SteerKits/ or contact your local Leica dealer for assistance.

2.4 New waylines via the mojo3D while guiding to old waylines

- The new mojo3D guidance patterns are revolutionary, diverse and dynamic. With the new mojoRTK software you can take advantage of these new guidance patterns such as Ultimate Curve. No matter what your field configuration, obstacles or requirements, Ultimate Curve will steer you in the right direction. The mojoRTK software will allow you to take advantage of these new guidance patterns by guiding to your previous waylines.

  Ultimate Curve guidance provides guidance alongside any previously recorded coverage. This means guidance can be provided around practically any irregular shaped field or back and forth along a complex contour line. As there is no need to pre-define a shape, Ultimate Curve guidance can be activated at anytime and guidance alongside pervious coverage will be provided.

  In Ultimate Curve guidance, working lines are parallel to the recorded coverage, and are created when the vehicle approaches a covered area with the guidance mode active. There is no requirement to pre-define Ultimate Curve guidance before it can be used.

2.5 Customisation of PVED configuration

- The ability to customise the PVED is now available in the Steering Wizard of the mojoRTK software

  If your equipment is fitted with a PVED, the customisation process is a simple five step one. Follow the on screen instructions and enter the requested requirements for:

  - Max left
  - Max right
  - Length of vehicle (two options)
  - Wheel Angle Sensor (WAS) input
  - External device

2.6 Error check for SteerDirect SRK firmware version and configuration compatibility

Service Menu Option

- To ensure your SteerDirect SRK firmware is the latest compatible version for the mojoRTK, the new software will perform a series of tests to ensure the SRK firmware is compatible and you are getting the maximum performance achievable from the system.

3 Upgrading the Leica mojoRTK software

3.1 Upgrading Software from Virtual Wrench™

General information	A new version of software, if available, may be obtained by downloading from Virtual Wrench™
Caution	Do not turn off the Leica mojoRTK while performing the software upgrade.

Downloading software, step-by-step

1. Start the mojoRTK console
2. Wait until the mojoRTK console has reached the main screen
3. Press OK to enter the main menu
4. Scroll down to Service and press OK
5. Scroll down to Software and press OK
6. Scroll to Check for updates and press OK
7. The mojoRTK will connect to Virtual Wrench and check if an upgrade is available
8. The console will indicate if an upgrade was found
9. If an upgrade was found the updates menu item will change to Download new software
10. Select Download new software and press OK
11. A confirmation message will be displayed
12. Select the OK option and press OK
13. Once the downloaded is complete, a confirmation to install the software will be displayed
14. After confirming that you wish to install the software the upgrade process will begin
15. Once the upgrade has completed the system will restart

3.2 Upgrading Software via USB Flash Drive

General information

A new version of software may be installed from a USB Flash Drive.

Visit www.virtualwrench.com to obtain the latest software download.

Caution

Do not turn off the Leica mojoRTK, or remove the USB Flash Drive, while performing the software upgrade.

Upgrading software with a USB Flash Drive, step-by-step

1. Format the USB stick which you will use in performing the upgrade
2. Copy the latest software (see Obtaining Software) to the top level directory of the USB stick
3. Insert the USB stick
4. Start the mojoRTK console
5. Wait until the mojoRTK console has reached the main screen
6. Press OK to enter the main menu
7. Scroll down to Service and press OK
8. Scroll down to Software and press OK
9. If there is no menu called Upgrade via USB, present then:
   a) The USB stick may not be recognised by the console
   b) The USB stick may be corrupted
   c) The file may not be named correctly or may be in the wrong location

10. If the menu item is present then select it and press OK
    a) If there are multiple versions of firmware on the USB stick then you will be asked to select which version to install
11. A confirmation to begin the upgrade will be displayed
12. Confirm to install the software and the upgrade process will begin
13. Once the upgrade has completed the system will restart

3.3 Additional Languages supported in the mojoRTK console

By default the languages supported on the mojoRTK console are:

English – Australian

English - UK

English – USA

There are additional languages which can be loaded at point of purchase or by your local dealer. These include:

Brazilian (Portuguese)

Danish

French

German

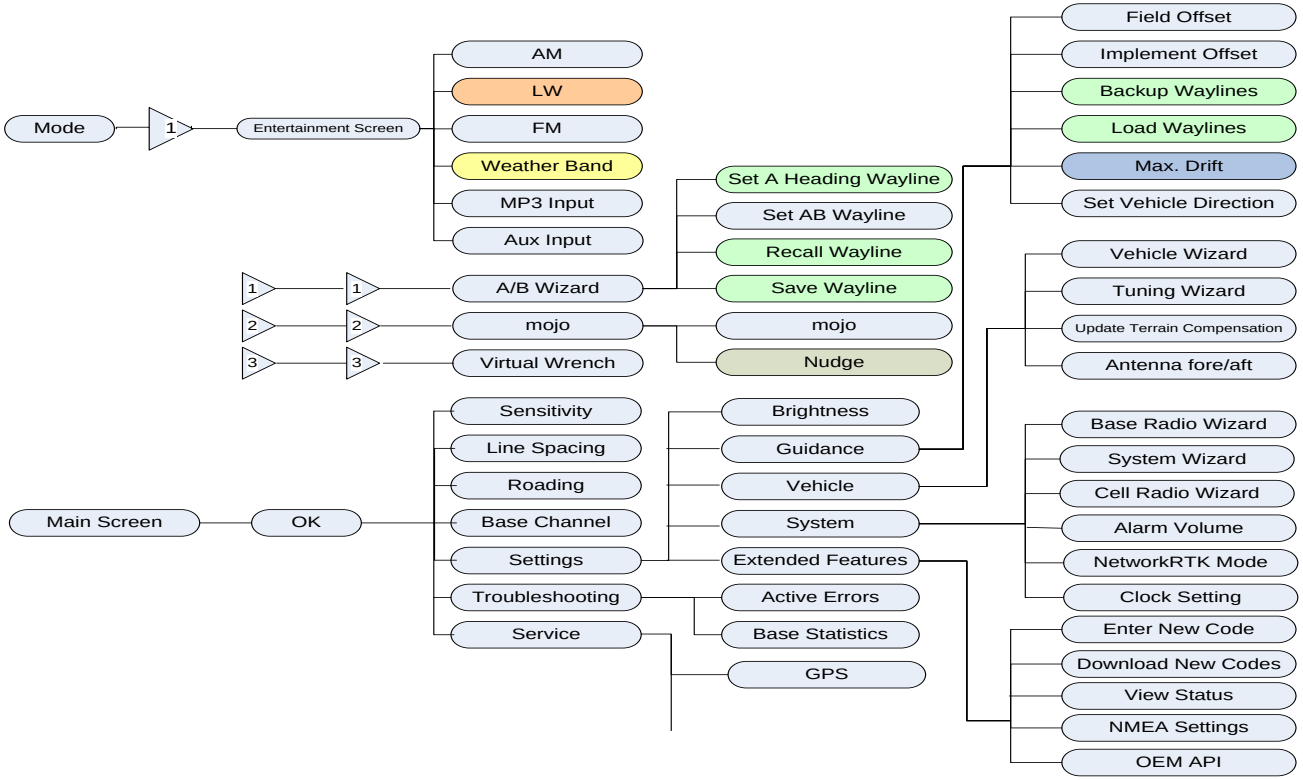
Italian

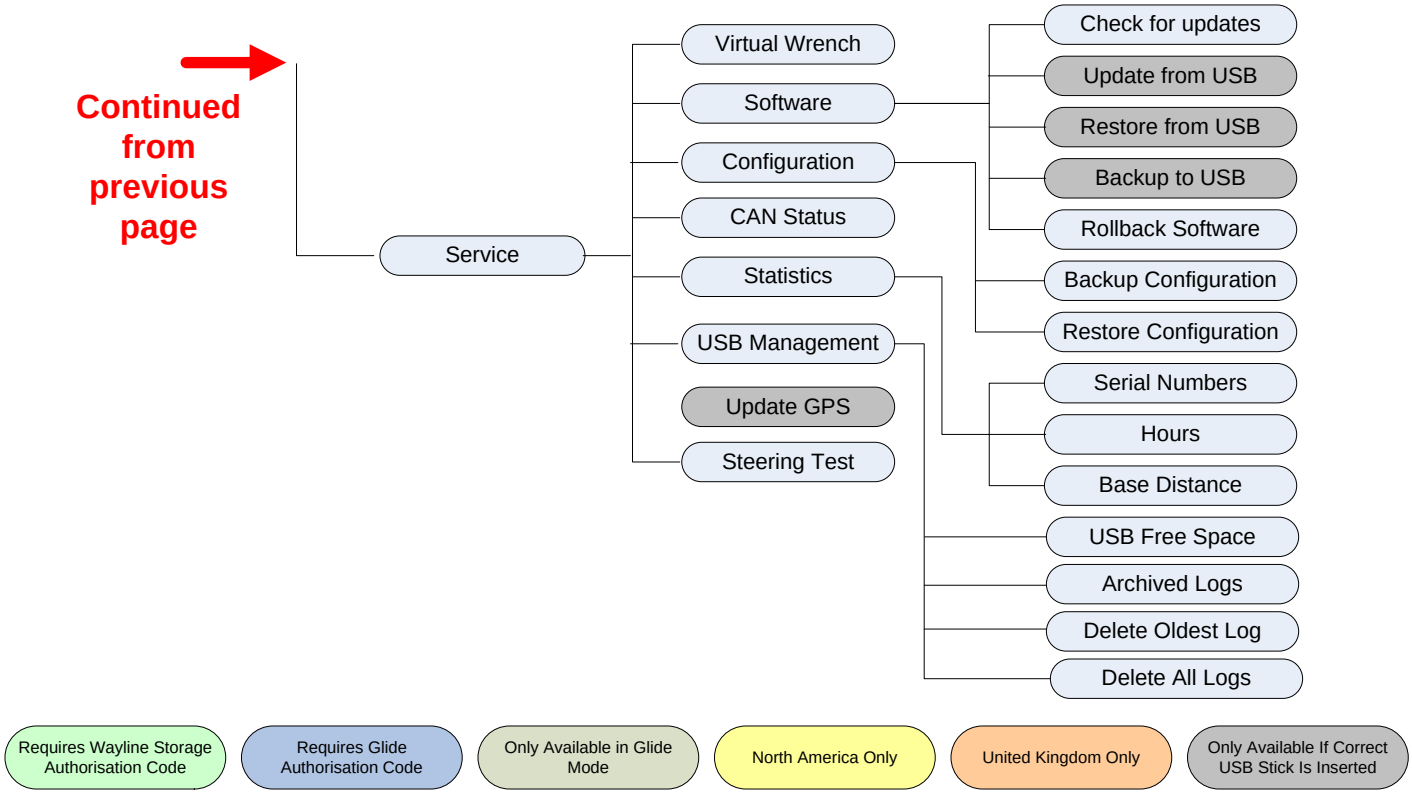
Russian

Spanish

3.4 mojoRTK console Menu Flow

The diagrams below are a representation of the menu structure of the mojoRTK console


Mode
1
Entertainment Screen
AM
LW
FM
Weather Band
MP3 Input
Aux Input
1
1
A/B Wizard
2
2
mojo
3
3
Virtual Wrench
Set A Heading Wayline
Set AB Wayline
Recall Wayline
Save Wayline
mojo
Nudge
Field Offset
Implement Offset
Backup Waylines
Load Waylines
Max. Drift
Set Vehicle Direction
Vehicle Wizard
Tuning Wizard
Update Terrain Compensation
Antenna fore/aft
Main Screen
OK
Sensitivity
Line Spacing
Roading
Base Channel
Settings
Troubleshooting
Service
Brightness
Guidance
Vehicle
System
Extended Features
Active Errors
Base Statistics
GPS
Base Radio Wizard
System Wizard
Cell Radio Wizard
Alarm Volume
NetworkRTK Mode
Clock Setting
Enter New Code
Download New Codes
View Status
NMEA Settings
OEM API


Continued from previous page
Service
Virtual Wrench
Software
Configuration
CAN Status
Statistics
USB Management
Update GPS
Steering Test
Check for updates
Update from USB
Restore from USB
Backup to USB
Rollback Software
Backup Configuration
Restore Configuration
Serial Numbers
Hours
Base Distance
USB Free Space
Archived Logs
Delete Oldest Log
Delete All Logs
Requires Wayline Storage Authorisation Code
Requires Glide Authorisation Code
Only Available in Glide Mode
North America Only
United Kingdom Only
Only Available If Correct USB Stick Is Inserted

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